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SUCCESS OF SELECTED STUDENTS HAVING LESS THAN NORMAL MINIMUM ADMISSIONS REQUIREMENTS.

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A SPECIAL TRIAL STUDY EDUCATIONAL PROGRAM WAS INITIATED FOR STUDENTS WHOSE PAST ACADEMIC RECORDS WOULD NOT NORMALLY HAVE QUALIFIED THEM FOR ADMISSION TO COLLEGE. STUDENTS WHO HAD MAINTAINED LESS THAN A 75 AVERAGE IN HIGH SCHOOL WERE ALLOWED TO MATRICULATE IN A REDUCED PROGRAM OF STUDIES IN THE EVENING DIVISION. THE STUDENTS WERE ALSO REQUIRED TO REGISTER FOR ONE FEWER COURSE THAN REGULAR DEGREE CANDIDATES AND TO MAINTAIN A 2.0 GRADE POINT AVERAGE. THOSE WHO ACHIEVED A 2.5 GRADE POINT AVERAGE WERE RAISED TO REGULAR CLASS STANDING. THE PERFORMANCE OF THE STUDENTS WAS ANALYZED IN RELATION TO SCORES ON THE REGENTS SCHOLARSHIP EXAMINATION, STATE UNIVERSITY ADMISSIONS EXAMINATION, HIGH SCHOOL GRADES AND AVERAGES, RECOMMENDATIONS, AND INTELLIGENCE. THE FINDINGS INDICATED THAT OF THE VARIABLES STUDIED IN RELATION TO PERFORMANCE, FEW WERE HIGHLY CORRELATED. IT WAS ALSO FOUND THAT STUDENTS WHO TRANSFERRED FROM THE TRIAL STUDY PROGRAM TO THE DAY PROGRAM EXPERIENCED A SERIOUS DECLINE IN GRADE POINT AVERAGE, YET THE VALIDITY OF THE PROGRAM CONCEPT WAS GENERALLY BORNE OUT. RESULTS WERE SUCH THAT IT WAS SUGGESTED THAT THE PROGRAM BE CONTINUED. (GD)

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SUCCESS OF SELECTED STUDENTS HAVING LESS THAN NORMAL MINIMUM ADMISSIONS REQUIREMENTS

Cooperative Research Project No. S-203

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I. The Research Problem

History of the College

Mohawk Valley Community College was founded in 1946 as the New York State Institute of Applied Arts and Sciences at Utica. One of five post-secondary institutions established on an experimental basis after World War II, the two-year public college offered programs leading to technical and semi-professional employment in business and industry.

In 1948, the State University of New York was created and the College became a member unit. Although it was a constituent part of the State University, the College retained its five-man Board of Trustees. Through the Board of Trustees the College retained and discharged the initial responsibility for the selection of the President, the development of curricula, the preparation of the budget, and the establishment of policies affecting the welfare of the College, all subject to the reserve authority of the State University trustees.

In 1953, the County of Oneida assumed sponsorship of the College, then known as Mohawk Valley Technical Institute, under the "Community College Law" section of the 1948 Education Law. As a community college, the Board of Trustees was expanded to nine members, and the budget was prepared for submission to and approval by the

local sponsor. The "Community College Law" authorized the cost of operating a college to be shared equally through student tuition, state aid and charges to local sponsors. Local sponsors of community colleges are usually, as in this case, counties, although they may be other units of local government. Capital costs are shared equally by the state and local sponsor.

As a community college, enrollment and physical services to the region grew. From 1946 to 1960, the College occupied temporary quarters in New Hartford and downtown Utica. In 1960, the College moved to new buildings in southeast Utica.

It was also in 1960 that the Middle States Association of Colleges and Secondary Schools gave the College full accreditation. In 1963, the Electrical and Mechanical Technology curricula were re-accredited by the Engineers' Council for Professional Development.

The academic curricula, which began with a program in Retail Business Management, expanded in response to the community's needs determined through community surveys. The College now offers ten educational programs: Advertising Design and Production; Banking, Insurance and Real Estate; Civil Technology; Electrical Technology; Engineering Science; Liberal Arts and Sciences;

Mechanical Technology; Nursing; Retail Business Management and Secretarial Science.

By September of 1964 enrollment had grown to 2,982 students, including 1,144 full-time students and 1,838 part-time students. The fall, 1964 enrollment did not include the programs in Liberal Arts and Sciences and Nursing which were newly authorized during 1964-65 to accept students in the fall of 1965.

In 1963, the College received permission to change its name to Mohawk Valley Community College. The request for the change of name was sought by the College in the belief that the new name better reflected the orientation and comprehensive nature of its academic programs.

The Trial Study Program

Although the College has throughout its history sought to meet the community's needs by increasing the variety of its curricula, it has also sought since 1961 to meet other needs by increasing the flexibility of its policies affecting the admission of students.

In response to the general social demand for education at the college level, the College began in 1961 to accept into a special Trial Study Program a number of students whose past academic records would not normally

have qualified them for admission.

Although the College had previously attempted to maintain an admissions program that would not arbitrarily exclude applicants who were capable of performing satisfactorily at the College, it had never the less felt that, in general, no applicant should be admitted whose high school average in academic subjects was less than 75. Beginning in 1961, however, certain applicants with high school averages below 75 in academic courses were offered admission to a Trial Study Program. No precise criteria were established for the selection of Trial Study Program students at that time, and their selection was left to the discretion of the Director of Admissions. Students who successfully completed the requirements of the Trial Study Program were granted matriculated status, and were allowed to pursue normal programs leading to a degree. Trial Study Program students were admitted in each of the existing departments, with the single exception of the Engineering Science program.

The Trial Study Program generally consisted of a reduced program of studies in the Evening Division. Some Trial Study Program students could have been accepted in the regular day program, but since it had been decided to keep them in separate class sections, limits on the availability of staff dictated their enrollment in the

evening program. The one exception to this was one section of Trial Study Program students admitted in the day program of the Retail Business Management Department for the class entering in the fall of 1964.

The Trial Study Program students were required to register for one less course than regular degree candidates in the same department. The normal first quarter academic loads of degree candidates in the fall of 1964 were: Advertising, Design and Production, 18 credit hours (6 courses); Banking, Insurance and Real Estate, 16 credit hours (5 courses); Civil Technology (a new program in 1962), 16 credit hours (5 courses); Electrical Technology, 18 credit hours (5 courses); Mechanical Technology, 20 credit hours (6 courses); Retail Business Management, 15 credit hours (5 courses); Secretarial Science, 17 credit hours (5 courses).

The Trial Study Program students were required to maintain a satisfactory (2.0) grade point average throughout the trial period. Academic averages are calculated on a quality point system. The number of quality points earned by a student in each course is proportional to the grade received and the number of credit hours involved. Grades of "A", "B", "C", "D", and "F" are given, respectively, 4,3,2,1, or 0 quality points per credit hour. A student's over-all average is calculated by dividing the

total number of quality points received by the total number of credit hours taken.

Trial Study Program students who achieved grade point averages of 2.5 or above at the end of the first quarter were offered matriculation. Subject to the availability of faculty, they were also offered the opportunity to transfer to the day program. Students who had grade point averages of at least 2.0 but below 2.5 were allowed to continue in the evening program, and if they continued to maintain grade point averages of 2.0 or above, they were allowed to matriculate. Those students who were unable to achieve at least a 2.0 average in Trial Study Program, either at the end of the first or later quarters, were dismissed from the College.

All applicants who were not admitted as degree candidates were considered for admission to the Trial Study Program. Since no formal record of the reasons for the actual selections had been kept, and since it was known that a variety of reasons had been called into play, the College found itself unable to analyze the performance of the Trial Study Program students in terms of the basis for their admission. It was the College's desire to establish more precise criteria for the selection of these students that ultimately led to the present study.

The actual number of Trial Study Program students who

participated in each year of the program has varied greatly. In all departments, 83 Trial Study Program students enrolled in 1961, 140 registered in 1962, 171 registered in 1963, and 131 in 1964. As of June, 1964, admission to the Trial Study Program for the academic year 1964-65 had been offered to only 206 of the 706 applicants who had been denied regular admission by that date.

II. Research Objectives.

During 1963-64, the College undertook an evaluation of the Trial Study Program with several objectives in mind. First, the College wished to study the pattern of success and failure of the students in the program, and to determine, if possible, the effects of the nature of the Trial Study Program itself on the success and failure of the students.

A "successful" Trial Study Program student was considered to be one who eventually achieved matriculated status. After matriculation a student was considered to be successful if he remained in good academic standing, i.e. maintained a 2.0 or higher grade point average.

Second, the College wished to determine whether any specific items of information contained in the students' high school records could be used to predict initial and continuing success for these students. This analysis was to include letters of recommendation submitted with the admissions application, high school grades, averages and ranks, and scores on the State University Admissions Examination or Regents Scholarship Examination.

Third, consistent with its desire to serve the community's needs as broadly as possible, the College hoped

to validate its policy of admitting to a special program a number of students who would normally be denied admission.

Fourth, the College wished to see if initial successes by students in the program could be maintained. At the end of the fall quarter in 1963, for example 40 (23 percent) of the 171 Trial Study Program students entering that year had grade point averages of 3.0 or above, and another 41 had averages from 2.5 to 3.0 However, the College was uncertain of the degree to which success in the Trial Study Program (achieving matriculation) predicted subsequent success in the regular program.

Fifth, the College wished to examine to some extent the admissions criteria used in the selection of regular degree candidates. If sizeable numbers of Trial Study Program students continued to be successful, then the admissions criteria which initially precluded their admission as degree students might merit revision.

An earlier study of the Trial Study Program students admitted in 1961 had revealed that performance at the College might not be strongly related to high school average.[1] The study found that 52.4 percent of the Trial

1. Armond J. Festine and Edwin G. Warner, Achievement at the College Level by Students Who Failed to Meet Established Entrance Criteria (Utica: Mohawk Valley Community College, 1961). Dittoed.

Study Program students had averages of 2.0 or above at the end of the first quarter, compared to 69 percent of the matriculated students also enrolled in the evening, and 61.6 percent of matriculated students in the day program.

III. Research Procedures

The research design called for the examination of the performance of Trial Study Program students entering the College in 1963 and 1964. These and other students in the two years concerned will hereafter be referred to as the Class '65 and the Class '66.

The research was limited to the performance of students in only four of the departments concerned: Advertising Design and Production; Banking, Insurance and Real Estate; Electrical Technology; and Retail Business Management. Attention was limited to these departments because the number of Trial Study Program students in the other departments was too small to permit meaningful statistical analysis.

The performance of the students in the four departments concerned was to be examined in relation to the students' scores on the State University Admissions Examination, high school averages, specific high school grades, recommendations about the students received from the high schools, and the reasons for their admission. The performance of the students on the Trial Study Program was also to be examined in relation to their subsequent performance in the regular degree program, and in relation to any accompanying change in course load.

Except for information contained on the recommendations received from the high schools and the reasons for the decision to admit the students, data concerning the several variables were available on Univac cards. Much of the data analysis was carried out on a No. 120 Univac Computer available at the College.

IV. Analysis of Data and Findings

The number of Trial Study Program students whose characteristics were examined in the research, and their status at the end of their first three quarters of study, are described in Table I. An integral part of the curriculum of each of the departments is a Cooperative Education Program in which the students alternate periods of attendance at the College with periods of employment in business or industry during the last two quarters of the first year of study, and the first two quarters of the second year. Because the research project terminated before the end of the summer quarter, data concerning the Class '66 which refer to standing at the end of three quarters of work at the College apply to only one-half of the Class. The balance of the Class '66 were participating in the Cooperative Education Program during the Spring Quarter, and they are currently enrolled in their third quarter of academic work during the present Summer Quarter.

At the end of the first three quarters of study, 24 percent of Trial Study Program students in the Class '65 and 22 percent of those in the Class '66 had been matriculated and remained in good standing. By that date, however, 29 percent of those in Class '65 and 53 percent of those in the Class '66 had been dismissed for academic reasons, only

TABLE I

Status of Trial Study Program Students
at end of First Three Quarters,
By Department and Year

Year and Department	Students Not Granted Matriculation By End of First Year				Students Granted Matriculation During or at End of First Year				
	No. in good standing	No. on probation	No. with-drawn	No. dis-missed	No. in good standing	No. on probation	No. with-drawn	No. dis-missed	TOTAL
Class '65									
Advertising	3	2	6	11	10	4	7	0	43
Banking	1	2	2	5	4	4	0	0	18
Electrical	0	5	3	10	9	3	5	2	37
Retail	5	2	8	12	12	5	2	2	48
Class '66									
Advertising	1	0	3	8	8	6	0	1	27
Banking	0	0	5	5	2	0	1	1	14
Electrical	0	1	1	12	6	2	0	1	23
Retail**	1	0	1	24	6	3	0	0	35
TOTAL	11	12	29	87	57	27	15	7	245

** Enrolled in Day Division.

a few of whom had previously attained matriculated status. The balance were either still in attendance and on probation, or had withdrawn for any one of a variety of reasons. Therefore, if the students in both groups and for both years are combined, 28 percent were in good academic standing, 16 percent were on probation, 18 percent had withdrawn, and 38 percent had been dismissed for academic reasons.

The total attrition experienced by Trial Study Program students is compared with that of regular degree students in Table II. While the attrition rate for Trial Study Program students is higher in most categories than for regular degree students, the discrepancies in a number of cases are not large.

Although attrition among the Trial Study Program students was in most cases not startingly high when compared to that of the other students at the College, it was sufficiently large to affect the procedures used in the analysis of data reported below. In the study of several of the variables which it was thought would relate strongly to the performance of the Trial Study Program students, it was found that the number of students was not large enough to result in significant statistical analysis. Attention was therefore turned to the entire student body. In other instances the initial findings were so clearly negative that further analysis of the variables concerned was

TABLE II

Percent of Degree and Trial Study Program Students Separated from the College at the End of Three Quarters, For All Reasons, By Year and Department

Dept.	Percent Separated							
	Class '63		Class '64		Class '65		Class '66	
	Degree	TSP	Degree	TSP	Degree	TSP	Degree*	TSP*
Advertising	40.8	36.1	33.6	28.8	45.3	58.5	35.4	46.2
Banking	56.6	66.6	46.6	49.8	47.3	40	46.5	64.1
Electrical	47.7	77.7	52.6	62	43.5	59.6	38.7	60.7
Retail	45.7	48.1	41.9	62.5	38.8	51.5	38.7	68.4**

* Many of the students are currently in their third quarter because of earlier participation in the cooperative work experience program.

** Enrolled in the Day Division.

abandoned. The reasons for both of these actions are elaborated in the discussion of the findings given below.

The balance of this section is concerned with reporting the findings covering the relationship between performance on the Trial Study Program and scores on the State University Admissions Examination or Regents Scholarship Examination, high school grades and average, rank-in-class, recommendations for admission, I. Q., and course load during the Trial Study Program and after transfer to the day program.

The State University Admissions Examination and New York State Regents Scholarship Examination.

Mohawk Valley Community College participates voluntarily in an admissions program that is in certain respects coordinated by the State University of New York. All applicants to the College are required to use application forms common to all institutions participating in the state-wide program, and must sit for a standardized examination in the form of either the New York State Regents Scholarship Examination (R.S.E.) or the State University Admissions Examination (S.U.A.E.). The chief advantage to the College of participating in the state-wide program is that of receiving equivalent standardized test information on virtually all applicants for admission.

The primary advantage for the applicant is that the scores on only one standardized test will serve to meet the entrance requirements of a number of different institutions.

The R.S.E. and S.U.A.E. involve the administration of equivalent forms of the same examination. In the case of the former, the examination is offered in October for students who are candidates for New York State Regents Scholarships. The results of the tests are the basis, along with tests of financial need, for the award of state scholarships. Equivalent forms of the same test are administered at other times during the year as the State University Admissions Examination. The scores from either administration of the test are considered to be equivalent, are reported to the member colleges in the same form, and are used equally in admissions programs of the colleges.

The R.S.E. and S.U.A.E. consist of two basic sections: an aptitude section on which the highest possible score is 150 points, and an achievement section with a maximum possible score of 150 points. The highest total score possible for any student is therefore 300.[2]

Both parts of the examination consist of five sub-sections. The aptitude section contains 100 questions

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2. Opening the Door to College Study Through The New York State Regents Scholarship Examination (Albany: The University of the State of New York, The State Education Department, Regents Examination and Scholarship Center, 1964). p. 23, f.

dealing with verbal aptitude, same-opposite questions, verbal analogy problems and sentence completion. Another 50 questions involving arithmetic reasoning are reported as a quantitative aptitude score.

The achievement portion of the examination consists of the following: English (vocabulary, spelling, literature, and reading), 40 questions; social studies, 40 questions; art and music, 10 questions; science, 30 questions; mathematics, 30 questions. The questions contained in the achievement portion generally emphasize material covered by the end of the 10th grade level in high school.

The initial analysis of the relationship between these scores and performance on the Trial Study Program did not result in correlations of sufficient size to be useful in predicting success. The analysis was therefore extended to degree students enrolled during the same periods. The findings for Trial Study Program and degree students in the Classes of '65 and '66 are reported in Tables III and IV.

Although some correlations improved for Trial Study Program students in the Class '65 when total scores were related to cumulative grade point average at the end of the first year of study, only one correlation that had not been statistically significant improved to the level where

TABLE III

Correlations Between First Quarter G.P.A.
and R.S.E. or S.U.A.E. Scores, Class '65

	Advertising		Banking		Electrical		Retail	
	Trial Program	Degree	Trial Program	Degree	Trial Program	Degree	Trial Program	Degree
	N = 34	N = 68	N = 18	N = 53	N = 30	N = 96	N = 40	N = 99
S-opp.	.00	.41*	-.37	.49*	-.11	.12	.46*	.24*
V-anal.	.12	.30*	.44	.45*	.27	.23*	.36*	.38*
Sen.	.14	.35*	.03	.42*	.12	.23*	.24	.32*
Verb. apt.	.10	.40*	.11	.55*	.14	.23*	.41*	.37*
Quan.	.33	.25*	.36	.51*	.26	.30*	.51*	.53*
TOT. APT.	.23	.38*	.27	.66*	.28	.31*	.49*	.43*
Engl.	.27	.41*	.14	.46*	.04	.25*	.55*	.25*
S.S.	.06	.36*	-.17	.33*	.14	.15	.24	.23*
Art-Mus.	.39*	.15	.17	.01	.27	-.05	.04	.01
Sci.	.19	.37*	-.25	.29*	.08	.09	.47*	.24*
Math.	.31	.42*	-.06	.66*	.41	.44*	.49*	.39*
TOT. ACH.	.30	.51*	-.09	.59*	.34	.31*	.56*	.39*
R.S.E. TOT.	.29	.46*	.10	.67*	.34	.34*	.55*	.47*

* Significant at the .05 level.

TABLE IV

Correlations Between First Quarter G.P.A.
and R.S.E. or S.U.A.E. Scores, Class '66

	Advertising		Banking		Electrical		Retail	
	Trial Program	Degree	Trial Program	Degree Degree	Trial Program	Degree	Trial Program	Degree
	N = 23	N = 69	N = 12	N = 58	N = 22	N = 86	N = 30	N = 95
S-opp.	.01	.26*	.18	.19	.29	.06	-.05	.39*
V-anal.	--**	.25*	-.15	.33*	.29	.13	.11	.51*
Sen.	--**	.24*	-.34	.17	-.03	.25*	-.12	.39*
Verb. apt.	.09	.28*	-.16	.27*	.21	.18	-.01	.53*
Quan.	.12	.16	.09	.49*	.29	.51*	.16	.55*
TOT. APT.	.12	.27*	-.09	.39*	.26	.35*	.07	.61*
Engl.	.38	.45*	.26	.15	.37	.23*	.03	.37*
S.S.	.09	.24	.34	.26*	.26	.09	.01	.22*
Art-Mus.	.04	.16	-.09	.20	-.13	-.13	-.08	.23*
Sci.	-.15	.07	-.27	.34*	.25	.29*	-.15	.23*
Math.	-.04	.42*	.02	.66*	.36	.44*	-.01	.39*
TOT. ACH.	.09	.34*	.13	.39*	.37	.33*	.05	.45*
RSE TOT.	.12	.31*	.02	.42*	.34	.37*	.02	.59*

*Significant at the .05 level of confidence.
** Not available.

it became significant at the .05 level (Table V).[3]

While a number of correlations between scores on the R.S.E. or S.U.A.E. were statistically significant, only a few were large enough to suggest that they might be used to predict performance for Trial Study Program students. An investigation was also made of the proportion of students who were in good standing after one quarter and after three quarters whose total test scores fell in different score intervals.

Table VI indicates that after only one term in the Trial Study Program, the proportion of students in good standing increases sharply for those having total scores of 100 or above. This relationship does not hold, however, after three quarters at the College.

The distribution of successful students after three quarters having different total scores is described more fully in Table VII. It is clear that there is no score above which one can predict successful cumulative grade point averages for an increasing majority of Trial Study

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3 For the purposes of the study it was felt that variables which did not correlate with performance at the College at the .05 level of confidence should not be used as a part of the criteria affecting the admission of students. Tables indicating the statistical significance for different coefficients of correlation and sample sizes are reproduced in a number of introductory texts on statistics, e.g. Robert H. Koenker, Statistics for Students in Education and Psychology (Bloomington, Illinois: McKnight and McKnight, 1961), Table 4, p. 145.

TABLE V

Class '65 Trial Study Program Students Only:
Correlations Between R.S.E. or S.U.A.E. Scores and
Grade Point Average

	Advertising		Banking		Electrical		Retail	
	N = 34		N = 18		N = 31		N = 36	
	1st Q.	Cum.	1st. Q.	Cum.	1st. Q.	Cum.	1st. Q.	Cum.
R.S.E. APT.	.23	.35*	.27	.27	.28	.18	.49*	.36
R.S.E. ACH.	.30	.19	-.09	.02	.34	.16	.56*	.50*
R.S.E. TOT.	.29	.30	.10	.16	.34	.19	.55*	.45*

*Significant at the .05 level.

TABLE VI

Percent of Trial Study Program Students Having First Quarter or Cumulative Grade Point Averages of 2.0 or Above, Class '65 and '66 Combined, By Period and R.S.E. or S.U.A.E. Scores

	Score Intervals - R.S.E. or S.U.A.E. Total							
	40-59	60-79	80-99	100-119	120-139	140-159	160-179	180-199
First Quarter GPA	50*	55	47	79	77	60	89	100*
Cumulative GPA After Three Quarters	0	36	38	55	57	56	66	50*

*Number of students negligible.

TABLE VII

Percent of Trial Study Program Students Having Grade Point Averages of 2.0 or Above at End of Three Quarters, By Year and R.S.E. or S.U.A.E. Scores

Year and Score	Percent of Students in Score Interval Having G.P.A. or 2.0 or Above								
	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109
Total Aptitude									
Class '65	0	58	43	69	75	60	60	60	--
Class '66	0*	22	28	45	31	33*	66*	0*	100*
Total Achievement									
Class '65	100*	44	58	65	47	58	83	--	--
Class '66	0*	20	21	28	64	50	50	0*	--

	40-59	60-79	80-99	100-119	120-139	140-159	160-179	180-199
Total Score								
Class '65	--	46	50	73	68	43	57	--
Class '66	0*	18	22	40	44	100*	50*	50*

*Three or fewer students in interval.

Program students.

Since correlations for the several scores of the R.S.E. and S.U.A.E. were higher for degree students than for Trial Study Program students in many instances, further attention was given to the relationship between these scores and the performance of degree students. Since these scores were not generally useful in predicting the performance of Trial Study Program students, it was felt that an improved ability to predict the performance of regular students might affect the basis on which all students, including Trial Study Program students, are selected.

A series of multiple correlations were computed between various scores on the R.S.E. or S.U.A.E. and grade point average at the College for the Class '66. The variables selected for initial multi-variate analysis were those which seemed individually to be the most strongly related to performance in the departments concerned on the basis of the initial correlations. In certain cases one of the three variables was high school average. Although further work in the use of multiple correlations is needed, the findings to date are reported in Table VIII.

The multiple correlations seem to represent a considerable improvement over other correlations to date, and may eventually become the best predictors of performance for students in these departments.

TABLE VIII

Multiple Correlations Between First Quarter Grade Point Average and Several Variables for the Class '66, By Department

Advertising (N = 72)

Variables	r
High school average, R.S.E. "English"	.84
High school average, R.S.E. "Math"	.75
High school average, R.S.E. "Total Achievement"	.83
R.S.E. "English", R.S.E. "Math"	.67
R.S.E. "English", R.S.E. "Total Achievement"	.67
R.S.E. "Math", R.S.E. "Total Achievement"	.55

Banking (N = 63)

Variables	r
R.S.E. "Quantitative", R.S.E. "Total Aptitude"	.83
R.S.E. "Quantitative", R.S.E. "TOTAL"	.74
R.S.E. "Total Aptitude", R.S.E. "Math"	.77
R.S.E. "Total Aptitude", R.S.E. "TOTAL"	.78
R.S.E. "Math", R.S.E. "TOTAL"	.75

TABLE VIII, cont.

Electrical (N = 94)

Variables	r
R.S.E. "Quantitative", R.S.E. "Total Aptitude"	.63
R.S.E. "Quantitative", R.S.E. "Math"	.75
R.S.E. "Quantitative", R.S.E. "Total Achievement"	.74
R.S.E. "Total Aptitude", R.S.E. "Math"	.73
R.S.E. "Total Aptitude", R.S.E. "Total Achievement"	.64
R.S.E. "Math", R.S.E. "Total Achievement"	.68

Retail (N = 99)

Variables	r
R.S.E. "Verbal analysis", R.S.E. "Quantitative"	.86
R.S.E. "Verbal analysis", R.S.E. "Total Aptitude"	.78
R.S.E. "Verbal analysis", R.S.E. "Total Achievement"	.78
R.S.E. "Quantitative", R.S.E. "Total Aptitude"	.80
R.S.E. "Quantitative", R.S.E. "Total Achievement"	.79
R.S.E. "Total Aptitude", R.S.E. "Total Achievement"	.79

High School Grades and Averages

High school average was found to be a very poor predictor of performance for Trial Study Program students. This was expected to be the case since to a large extent the concept of the Trial Study Program is based on the assumption that this is so.

An applicant was normally denied admission as a degree candidate, but reconsidered as a potential Trial Study Program student, because his high school average was below 75. However, the actual range of high school averages for Trial Study Program students in the Classes of '65 and '66 was from 67 to 79, although all but a few were in a range from 69 to 74.

The use of high school averages as predictors of performance is further complicated by the way in which the averages are computed by the admissions office. Only grades in "academic" subjects are used in computing high school averages, and the actual number of different grades used in computing the averages varies considerably among the applicants. This process is further complicated by the varied grading practices in the high schools, e.g., "passing" is 65 in some high schools, but 75 in others.

Since the students on the Trial Study Program present a narrow range of high school averages, any significant

variation in subsequent performance at the College would necessarily indicate a poor relationship between these two variables. Indeed, for all Trial Study Program students in all departments in the Classes '64 and '65 combined, the correlation between high school grade point average and first quarter grade point average at the College was only r = .09 for 204 students (not significant at the .05 level).

Correlations between high school average and first quarter performance at the College are reported in Table IX for Classes '65 and '66. Although none of the correlations for Trial Study Program students were statistically significant at the .05 level, all of the correlations were significant for degree students. However, only in the case of degree students in the Advertising Department in the Class of '66 was the correlation obtained higher than one or more of those available from the R.S.E. or S.U.A.E. For the degree students in Advertising, high school average was one of the variables used in computing the multiple correlations reported in Table VIII.

Correlations between specific high school courses and first quarter performance on the Trial Study Program were found to be quite low, the single highest being r = .22 for Business Math in Class '64 and '65 combined (94 students, significant at the .05 level). Although certain correlations were again higher for specific grades when computed

TABLE IX

Correlations Between High School Grade Point Average and First Quarter Grade Point Average on Trial Study Program

Dept.	Class '65				Class '66			
	Degree Students	N	Trial Program	N	Degree Students	N	Trial Program	N
Advertising	.24*	70	.085	34	.48*	69	.062	23
Banking	.44*	55	.010	18	.28*	57	.346	12
Electrical	.23*	100	.014	30	.26*	88	.161	22
Retail	.40*	98	.151	40	.24*	97	-.153	30

*Significant at the .05 level.

for the performance of degree students, few were large enough to be statistically significant. Those that were significant, however, represented no improvement over correlations available from scores on either the R.S.E. or S.U.A.E.

One of the factors that prevents specific high school grades from being somewhat more useful as predictors of performance at the College is that for some of the high school courses that do seem related, the number of applicants having taken such courses is usually small. Conversely, most applicants present scores on the R.S.E. or S.U.A.E., and the sample size involved in the study of each score is therefore much larger. The smaller sample sizes associated with specific high schools courses has usually meant that the majority of the higher correlations were not statistically significant.

High School Rank in Class.

It was thought initially that the high school rank-in-class of students might be related to success on the Trial Study Program. This proved not to be the case after initial gross analysis, and was not surprising once data was analyzed concerning high school grades and grade point averages. An apparent relationship was found in the Class '65, but it did not hold true for the Class '66 (Table X).

TABLE X

Percent of Trial Study Program Students
Achieving Indicated Grade Point Average After First Quarter,
By Rank in High School Class and Year, All Departments.

GPA on TSP

High School Rank in Class		Below 2.0	2.0 - 2.4	2.5 or above	
Class '65	upper 1/2 of class	5%	25%	70%	100%
	lower 1/2 of class	34%	20%	46%	100%
Class '66	upper 1/2 of class	58%	32%	10%	100%
	lower 1/2 of class	58%	20%	22%	100%

Precisely the same proportion (42 percent) of the Trial Study Program students in the Class '66 from the upper and lower halves of their high school classes had grade point averages of 2.0 or above at the end of the first quarter. The proportion of students with averages of 2.5 or above for students from the lower one-half of their high school classes was twice the proportion for those from the upper one-half of their classes.

This variable was not analyzed further.

High School Recommendations.

The application form used for admission to the units of the State University of New York that cooperate in the Office of Admissions Program contains two parts. The second of these, or Form A-2, contains sections on which high school teachers and guidance counselors are asked to make a series of judgments concerning the applicant's personality and motivation, and to make a specific recommendation concerning his admission to the program for which he is applying. Pages 3 and 4 of the Form A-2, the pages on which this information is to be entered, are reproduced in Figures 1 and 2.

In order to analyze the relationships between these recommendations and the performance of Trial Study Program students, an attempt was made to quantify the information

Figure 1

LAST FIRST MIDDLE

AME OF APPLICANT

→ N.B. OMISSIONS ON PAGES 2, 3 AND 4 MAY BE INTERPRETED TO THE DISADVANTAGE OF THE APPLICANT. ←

PERSONALITY RECORD

(Confidential — For use of the Committee on Admissions and the Deans only)

In the selection of students, weight is given to character and personality as well as to scholastic attainment. Accordingly, the Committee on Admissions welcome the receipt of information as complete as possible about applicants for admission. In addition to serving the purposes of the Committee on nissions, the information requested below will, if the applicant is admitted, be useful to the Deans in their efforts to aid the student to obtain the atest possible good from the college course. The Principal may himself fill out this part of the form, or he may refer it to some other member of the ulty who has had the opportunity to know the applicant more intimately.

The following characterizations are descriptions of behavior; they are not ratings. *It is recommended that where possible the judgment of a number he pupil's present teachers be indicated by use of the following method:*

PLE { SERIOUSNESS OF PURPOSE

1 M(5) 2

PURPOSELESS | VACILLATING | POTENTIAL | SELF-DIRECTED | PURPOSEFUL

M(5) indicates the most common or modal behavior of the pupil as shown by the agreement of five of the eight teachers reporting. The location of umerals to the left and right indicates that one teacher considers the pupil vacillating and that two teachers consider him purposeful. If preferred the ct fields or other areas of relationship with the pupil may be used to replace the numeral.

SERIOUSNESS OF PURPOSE	PURPOSELESS	VACILLATING	POTENTIAL	SELF-DIRECTED	PURPOSEFUL
INDUSTRY	SELDOM WORKS EVEN UNDER PRESSURE	NEEDS CONSTANT PRESSURE	NEEDS OCCASIONAL PRODDING	PREPARES ASSIGNED WORK	SEEKS ADDITIONAL WORK
INITIATIVE	SELDOM INITIATES	CONFORMS	VARIES WITH CONDITIONS	SELF-RELIANT	ACTIVELY CREATIVE
INFLUENCE	PASSIVE	RETIRING BUT COOPERATIVE	VARYING	CONTRIBUTING	STRONGLY CONTROLLING
CONCERN FOR OTHERS	ANTI-SOCIAL	INDIFFERENT	SELF-CENTERED	SOMEWHAT SOCIALLY CONCERNED	DEEPLY AND GENERALLY CONCERNED
RESPONSIBILITY	UNRELIABLE	SOMEWHAT DEPENDABLE	USUALLY DEPENDABLE	CONSCIENTIOUS	ASSUMES MUCH RESPONSIBILITY
EMOTIONAL STABILITY	HYPEREMOTIONAL / APATHETIC	EXCITABLE / UNRESPONSIVE	USUALLY WELL-BALANCED	WELL-BALANCED	EXCEPTIONALLY STABLE
INTELLECTUAL CAPACITY	DULL, SLOW	LIMITED	SENSIBLE	ALERT	CRITICAL CLEARHEADED
PERSONAL APPEARANCE	UNDESIRABLE	CARELESS	ACCEPTABLE	FAVORABLE	ATTRACTIVE
HEALTH AND VITALITY	PROBABLY DISQUALIFYING	SLUGGISH	NORMAL	GOOD	VIGOROUS
PROFESSIONAL PROMISE	NONE	QUESTIONABLE	SOME	HIGHLY PROMISING	UNQUESTIONABLY PROMISING

Figure 2

EASE LIST THE EXTRACURRICULAR ACTIVITIES IN WHICH THE APPLICANT PARTICIPATED, INCLUDING THE OFFICES HELD.

S THE APPLICANT ANY SPEECH, HEARING, VISION OR OTHER PHYSICAL DEFECTS? ☐ YES ☐ NO
YES, PLEASE DESCRIBE.

S THE APPLICANT ANY HISTORY OF EMOTIONAL INSTABILITY? ☐ YES ☐ NO
YES, PLEASE EXPLAIN:

HAT CONSIDERATION SHOULD BE GIVEN THIS APPLICANT BECAUSE OF UNUSUAL CONDITIONS, SUCH AS LONG PERIODS OF ILL ALTH, BILINGUAL HOME BACKGROUND, EXCESSIVE EMPLOYMENT DURING THE SCHOOL YEAR, ETC.?

HAT HAS BEEN THE ATTITUDE OF THIS APPLICANT TOWARD SCHOLASTIC WORK IN THE LAST YEAR OR TWO?

ASE INDICATE THE APPLICANT'S INTEREST IN THE CURRICULUM FOR WHICH HE IS APPLYING:

OT INTERESTED — REASONABLY — EXTREMELY

NO OPINION.....

IMATE OF APPLICANT'S FUTURE SUCCESS, BASED ON THE PURPOSE OF THIS APPLICATION:

☐ LITTLE SUCCESS ☐ MAY ENCOUNTER SOME DIFFICULTY ☐ AVERAGE ☐ ABOVE AVERAGE ☐ SUPERIOR

CIFIC RECOMMENDATION:

☐ RECOMMENDED ☐ NOT RECOMMENDED FOR THIS COLLEGE ☐ PREFER NOT TO MAKE RECOMM.

→ N.B. OMISSIONS ON PAGES 2, 3 AND 4 MAY BE INTERPRETED TO THE DISADVANTAGE OF THE APPLICANT. ←

NATURE OF PERSON FILLING OUT THE "PERSONALITY RECORD"	POSITION OR TITLE

FRANK SUPPLEMENTARY STATEMENT REGARDING ANY MATTER OF INTEREST TO THE COMMITTEE ON ADMISSIONS, OR LATER TO E DEAN, WILL BE GREATLY APPRECIATED. IF NEEDED, AN ADDITIONAL SHEET MAY BE ATTACHED.

SIGNATURE OF PERSON PREPARING SUPPLEMENTARY STATEMENT	POSITION OR TITLE

contained on the recommendations. Each of the eleven scales on the "Personality Record" (Figure 1) consists of five parts. A value of 1 was assigned to the scale items on the left of each scale, and a value of 5 was assigned to items on the extreme right of each scale. The other items were assigned values of 2, 3, and 4, reading from left to right.

Three scales were analyzed from page 4 of the Form A-2 (Figure 2). These were the scales on which the person completing the form was asked to estimate the applicants' interest in the curriculum for which he was applying, estimate the applicants' future success, and enter a specific recommendation. Scores were assigned as follows:

1. Applicants interest in curriculum -

   not interested - 1

   reasonably - 2

   extremely - 3

   no opinion - 0

2. Estimated future success -

   little success - 1

   may encounter some difficulty - 2

   average - 3

   above average - 4

   superior - 5

3. Specific recommendation -

recommended	- 3
not recommended for this college	- 2
prefer not to make recommendation	- 1

The following combinations of data from the Form A-2 were quantified, and the resulting scores were studied in relation to performance of Trial Study Program students.

Y_1 = sum of the scores on lines 1-6 and 8-11 on the "Personality Record" (Figure 1)

Y_2 = sum of scores on lines 1-3, 6, 8, and 11 on the "Personality Record" (Figure 1)

$Y_3 = Y_1$ + sum of the scores from page 4 of the Form A-2 (Figure 2)

$Y_4 = Y_2$ + the sum of the scores of the items indicated on page 4 of the Form A-2 (Figure 2)

The several "Y" scores were selected for two major reasons. The first was a desire to obtain a score that would reflect as many facets of the students personality as possible. The second reason was a desire to obtain a score which would reflect only those factors thought to be related to skills and attitudes involved in academic

performance rather than general social adjustment. This resulted in the Y_1 and Y_2 scores, respectively. The scale from the Personality Record that asked for an estimate of the applicant's emotional stability was excluded from the analysis on the assumption that most persons completing the form could not competently give ratings on this scale. The results of the analysis are reported in Table XI.

Although the application form is uniform for all students, many high schools substitute their own version of the "personality record". In many cases, therefore, the personality records of students could not be quantified and were not included in the analysis. Because of the small sample size in many categories, only three of the correlations reported in Table XI were significant at the .05 level.

As in the case of scores from the Regents Scholarship Examination and State University Admissions Examination, the proportion of successful students in different score intervals on the four "Y" scores did not increase regularly as the scores increased. Successful and unsuccessful students were so evenly distributed throughout the full range of scores that further analysis was abandoned. (Table XII)

It may be possible that extending the analysis to degree candidates would improve the relationship between

TABLE XI

High School Recommendation and Performance
of Trial Study Program Students,
By Department and Year

Scores From Recommendations		Correlations With First Quarter G.P.A.							
		Advertising		Banking		Electrical		Retail	
		r	(N)	r	(N)	r	(N)	r	(N)
Y_1	Class '65	.39	(23)	.26	(14)	.04	(18)	.22	(27)
	Class '66	.20	(23)	.61	(10)	.23	(16)	.29	(30)
Y_2	Class '65	.27	(23)	.06	(14)	.09	(18)	.19	(27)
	Class '66	.27	(23)	.54	(10)	.21	(16)	.40*	(30)
Y_3	Class '65	--	--	.29	(13)	.01	(18)	.20	(26)
	Class '66	.24	(23)	.61	(10)	.25	(16)	.30	(30)
Y_4	Class '65	.19	(23)	.18	(13)	.02	(18)	.17	(26)
	Class '66	.31	(23)	.59	(10)	.24	(16)	.41*	(30)
		Correlations With G.P.A. After Three Quarters, Class '65 Only.							
Y_1		.43*	(23)	.14	(14)	.18	(18)	.23	(27)
Y_2		.33	(23)	.09	(14)	.20	(18)	.21	(27)
Y_3		.39	(23)	.09	(13)	.17	(18)	.20	(26)
Y_4		.31	(23)	.02	(13)	.18	(18)	.17	(26)

*Significant at the .05 level.

TABLE XII

Percent of Trial Study Program Students
Having Grade Point Averages of 2.0 or Above,
By Term and Score on High School Recommendations,
Classes '65 and '66 Combined

Y_1 Scores

Term.	20-22	23-25	26-28	29-31	32-34	35-37	38-40	41-43	44-46	47-49
First Quarter	100*	50*	57	55	58	52	66	50	82	60
After Third Quarter	100*	50*	43	32	48	41	39	40	64	44

Y_2 Scores

	10-11	12-13	14-15	16-17	18-19	20-21	22-23	24-25	26-27
First Quarter	100*	66*	47	46	55	66	72	50	100*
After Third Quarter	100*	0*	50	36	54	56	53	100	100*

TABLE XII cont.

Y_3 Scores

	25-30	31-36	37-42	43-48	49-54	55-60	61-66
First Quarter	66*	59	45	64	59	69	0*
After Third Quarter **	66*	53	41	58	100	--	--

Y_4 Scores

	15-17	18-20	21-23	24-26	27-29	30-32	33-35
First Quarter	100*	54	32	60	63	73	58
After Third Quarter**	100*	50	42	48	53	53	100

*Three or fewer students in interval.
** Class '65 only.

high school recommendations and performance at the College. The process of quantifying the recommendations is a time-consuming one, however, and unless the process provided a much better basis for predicting performance than do R.S.E. and S.U.A.E. scores, it would be difficult to justify the quantification of the recommendation forms as a part of the regular admissions process.

A final complication in the further analysis of the high school recommendations is that the Form A-2 itself was revised during the past year, and the records of applicants admitted for the fall of 1965 cannot be compared with those of earlier years.

Otis Quick-Scoring Mental Ability Tests, Gamma Test: Form Em.

In the fall of 1964 the counselors in the Department of Student Personnel Services at the College administered the Otis Quick-Scoring Mental Ability Test (Gamma Test: Form En) to all incoming freshmen. The scores for Trial Study Program students in the Class '66 were made available to the investigators. Unfortunately, similar scores are not available for the Class '65.

The I.Q. scores obtained from this test administration were studied in relation to performance on the Trial Study Program, both alone and in combination with data obtained from the Form A-2 of the admissions application. The

analysis of the I.Q. scores in conjunction with data from the high school recommendation involved the creation of two additional "Y" scores:

$$Y_5 = Y_3 + (\text{I.Q. score} - 100)$$

$$Y_6 = Y_4 + (\text{I.Q. score} - 100)$$

The number 100 was subtracted from each score in order to reduce the size of the scores to be analyzed. Only in the case of students in the Department of Retail Business Management were the resulting correlations of statistical significance at the .05 level. (Table XIII). In all cases, the correlations between Y_5 and Y_6 and first quarter grade point average on the Trial Study Program were higher than for I.Q. alone, except for Y_5 in the Retail Business Management department.

At the end of the first quarter it appeared that I.Q. scores above 110 were accompanied by substantially increased proportions of students achieving grade-point averages of 2.0 or above, but this relationship was lost when compared with grade point averages after the first three quarters (Table XIV).

Although the proportion of successcul students does not increase regularly as I.Q. increases, a much larger proportion of students whose R.S.E. or S.U.A.E. Total

TABLE XIII

Correlations Between First Quarter Grade Point Average on Trial Study Program, Otis I.Q., and "Y" Scores, for the Class '66, By Department

	Advertising		Banking		Electrical		Retail	
	r	(N)	r	(N)	r	(N)	r	(N)
Otis I.Q.	.17	(24)	.01	(11)	.09	(21)	.51	(33)*
Y_5	.19	(23)	.40	(10)	.17	(16)	.45	(28)*
Y_6	.21	(23)	.30	(10)	.13	(16)	.53	(28)*

*Significant at the .05 level.

TABLE XIV

Percent of Class '66 Trial Study Program Students Having Grade Point Averages of 2.0 or Above, By Otis I.Q. Score and Term.

	Otis I.Q. Score Intervals								
	85-89	90-94	95-99	100-104	105-109	110-114	115-119	120-124	125-129
Term									
First Quarter	100*	33*	43	57	24	52	75	67*	100*
Third Quarter	0*	0*	14	38	13	30	60	33*	100*

*Three or fewer students in interval.

scores are at least 100 and whose I.Q. scores are at least 110 are successful than is the case for students not in this category (Table XV).

By extending the analysis of I.Q. scores to degree students, or through the use of multiple correlations, I.Q. scores may become useful predictors of success for Trial Study Program students. Since I.Q. data is not obtained through the normal admissions process, however, it is not a variable that can be introduced in the admission of regular degree students.

Course Load and Performance of Trial Study Program Students

One of the major concerns at the beginning of the study was to identify possible effects of the structure of the Trial Study Program on the students enrolled in it, and to determine to what extent success in the Trial Study Program is related to subsequent performance as a degree candidate. Analysis of the effects of the structure of the program was restricted by the fact that staff limitations dictated the enrollment of Trial Study Program students in the Evening Division (except for Retail Business Management students in the Class '66), and by the fact that the administrative decision to assign the students to separate sections precluded their random assignment to day

TABLE XV

Percent of Trial Study Program Students Achieving Grade Point Averages of 2.0 or Above, By Term, I.Q. Score, and Total Score on R.S.E. or S.U.A.E. Class '66

	R.S.E. or S.U.A.E. Total Score Below 100 or I.Q. Score Below 110	R.S.E. or S.U.A.E. Total Score at Least 100, and I.Q. Score at Least 110
First Quarter	46%	74%
Third Quarter	17%	53%

sections where space in regular sections existed. It was possible, however, to record the experience of successful Trial Study Program students as they transferred from the evening program to the day, and as they decreased, maintained, or increased the credit hour loads which they had been pursuing in the evening.

Table XVI indicates the relationship between credit hour load and grade point average as Trial Study Program students move from the evening to the day programs, and as they either increase or decrease their credit hour loads. The entries reflect the fact that nearly all students experienced a serious decline in grade point average as they moved from evening to day, and that the decline was the most severe among students who increased their credit hour load at the time of transfer. A comparison of the experience of students transferring after one or two quarters in the evening reveals no significant difference. Students transferring after two quarters in the evening seem to have no advantage over those transferring after one quarter.

Summary of Findings.

The study was concerned with an analysis of the performance of certain Trial Study Program students who had been admitted to the College for a reduced program of

TABLE XVI

Mean Change in Grade Point Average for Trial Study Program Students Transferring From Evening to Day After One or Two Quarters In Evening Division, By Year And Change In Credit Hour Load*

I. Class '65 Only

Credit Hour Load During First Quarter	Change in Credit Load During Second Quarter				
	-5 or more cr.	-2 to -4 cr	-1 to +1 cr	+2 to +4 cr	+5 cr or more
	Mean Change in G.P.A.				
10 credits or less	--	--	--	-.56 (4)	-1.86 (2)
11 to 13 credits	--	--	--	-1.12 (7)	-.42 (1)
14 credits or more	--	--	--	-1.27 (4)	-1.02 (5)

II. Class '66 Only

Credit Hour Load During First Quarter	Change in Credit Load During Second Quarter				
	-5 or more cr.	-2 to -4 cr	-1 to +1 cr	+2 to +4 cr	+5 cr or more
	Mean Change in G.P.A.				
10 credits or less	--	--	--	-.25 (3)	-1.01 (3)
11 to 13 credits	--	--	--	-.79 (9)	--
14 credits or more	--	--	-.55 (1)	-1.08 (6)	--

*The numbers in parentheses indicate the number of students in the category.

TABLE XVI cont.

III. Classes '65 and '66

Credit Hour Load During First Quarter	Change in Credit Load During Second Quarter				
	-5 or more cr	-2 to -4 cr	-1 to +1 cr	+2 to +4 cr	+5 cr or more
	Mean Change in G.P.A.				
10 credits or less	--	--	--	-.43 (7)	-1.35 (5)
11 to 13 credits	--	--	--	-.93 (16)	-.42 (1)
14 credits or more	--	--	-.55 (1)	-1.16 (10)	-1.02 (5)

TABLE XVI cont.

Change From Evening To Day After Two Quarters In Evening.

I. Class '65 Only

Credit Hour Load During Second Quarter	Change in Credit Load During Third Quarter				
	-5 or more cr	-2 to -4 cr	-1 to +1 cr	+2 to +4 cr	+5 cr or more
	Mean Change in G.P.A.				
10 credits or less	--	--	--	--	--
11 to 13 credits	--	--	-.16 (1)	-1.11 (4)	--
14 credits or more	--	--	-.50 (4)	--	--

II. Class '66 Only

Credit Hour Load During Second Quarter	Change in Credit Load During Third Quarter				
	-5 or more cr	-2 to -4 cr	-1 to +1 cr	+2 to +4 cr	+5 cr or more
	Mean Change in G.P.A.				
10 credits or less	--	--	--	--	--
11 to 13 credits	+.08 (1)	--	--	--	--
14 credits or more	--	--	-.64 (8)	.77 (6)	--

TABLE XVI cont.

III. Classes '65 and '66

Credit Hour Load During Second Quarter	Change in Credit Load During Third Quarter				
	-5 or more cr	-2 to -4 cr	-1 to +1 cr	+2 to +4 cr	+5 cr or more
	Mean Change in G.P.A.				
10 credits or less	--	--	--	--	--
11 to 13 credits	+.08 (1)	--	-.16 (1)	-1.11 (4)	--
14 credits or more	--	--	-.59 (12)	-.77 (6)	--

studies. The students had been denied admission as degree candidates because they did not meet the normal admissions requirements.

The performance of the students was analyzed in relation to scores on the Regents Scholarship Examination or State University Admissions Examination, high school grades and averages, high school rank-in-class, recommendations, and I.Q. The structure of the Trial Study Program itself was also analyzed by comparing the performance of students on the Trial Study Program with their subsequent performance as they transferred to the day program and as they either maintained or increased their former course load.

The findings indicated that of the variables studied in relation to performance, few variables were highly correlated. However, extension of the analysis to the performance of regular degree candidates resulted in a larger number of statistically significant correlations.

In general, various scores on the Regents Scholarship Examination or State University Admissions Examination appear to be more closely related to the performance of Trial Study Program students than do the other variables analyzed. Initial attempts at multi-variate analysis seem to improve certain of these relationships.

It was also found that students who transfer from the Trial Study Program to the day program experience a serious

decline in grade point average, and that this is particularly true for those who increase their course loads at the time of transfer. Students transferring after two terms in the evening do not have an advantage in this respect over those students who transfer after only one term in the evening.

V. Conclusions and Recommendations

The original research proposal raised a number of questions for which the College wished to find answers. Briefly, the College wished to know why a number of students were successful who would not normally have been granted admission. It should be recalled that success in the case of Trial Study Program students referred to their having earned matriculated status. Subsequent success was and is the ability of these students to remain in good academic standing after having become degree candidates.

The College also wished to determine whether any specific items of information in the records of these students could have been used to predict either their initial or continuing success, and whether the nature of the Trial Study Program itself affected the success of the students. Basic to the entire proposal, however, was the College's desire to validate its policy of admitting such students.

The findings suggest the following conclusions:

1. <u>The fact that Trial Study Program students have achieved matriculation and have subsequently earned degrees establishes the validity of the concept of the program</u>.

Twenty-four percent of the Trial Study Program students in the Class '63 and twelve percent of those in the Class '64 were awarded degrees after two years of study. Since these students would not have been accepted initially as degree students, the concept of the Trial Study Program seems to have been validated by their ultimate success.

2. <u>There seems to be little doubt that Trial Study Program students were more successful in their academic programs up to the point of matriculation than they would have been as regular day degree students. This seems to be primarily due to their reduced load in the evening division. The result has been that the Trial Study Program has not served as an accurate predictor of performance in the day program</u>.

Students on the Trial Study Program were engaged in a reduced schedule of courses in the evening. Those who satisfied the special requirements of that program suffered sharp declines in grade point average after transferring to the regular program after either one or two terms in the evening. For whatever reason, success in a reduced program of studies in the evening does not assure success in an equivalent or heavier program of studies in the day program. It seems likely, therefore, that the reduced

program in the evening enhances the chances of matriculation of the Trial Study Program students.

3. It is likely that if Trial Study Program students had matriculated at a lighter than normal load in the day program, a larger proportion of the students would have continued in good academic standing after matriculation. However, this would have prevented their graduation at the end of the normal two year period.

Since the greatest decline in grade point average was experienced by students who increased their course load at the time of matriculation, it is likely that more students would have continued to do satisfactory work if they had not increased their course load.

4. A larger proportion of the Trial Study Program students were successful than might have been expected, assuming that the admissions criteria used to select degree candidates were valid. However, high school grade point average, which was the basis for having denied these students admission as degree candidates, was found to not be strongly related to performance at the College for either degree or Trial Study Program students.

High school grade point average has been the primary criterion used in admission of applicants to the College, and has been a critical factor in rejecting applicants as degree students. Applicants have usually been considered for the Trial Study Program only if their high school averages fall below 75.

The analysis of the performance of degree students revealed, however, that high school grade point average is unreliable as a predictor of performance, i.e., correlations between high school average and grade point average at the College vary considerably in different years. Although such correlations are statistically significant, they are not high enough to justify using this variable as the major criterion in the acceptance or rejection of applicants.

The relationship between high school average and performance at the College is weaker for Trial Study Program students than for degree students, and produces no statistically significant correlations.

While this is to some extent due to the narrow range of high school averages presented by the Trial Study Program students, it is also a further reflection of the inadequacy of high school average as a predictor of success at the College.

5. Information submitted by applicants does contain data useful in predicting success at the College. However, the factors which are most strongly related to success in one department may not be the same as those related to success in other departments.

Although the analysis of the several variables resulted in relatively few correlations with the performance of Trial Study Program students that were statistically significant, a large number of significant correlations were found between these variables and the performance of degree students. The most strongly related factors were various sub-scores of the Regents Scholarship Examination and State University Admissions Examination. No one sub-score was the most strongly related for more than one department, however. For degree students in Advertising, the Total Achievement score was correlated most highly with grade point average at the College. In the case of the Banking, Electrical, and Retail departments, the most strongly related scores were the Total score, Mathematics Achievement score, and Quantitative Aptitude scores respectively.

While the above variables offer only a limited ability to predict the performance of students, their

further investigation by means of multi-variate analysis shows promise of greatly improving the College's ability to predict which applicants will become successful degree students. There is every reason to believe that the College will become increasingly able to translate information from the records of applicants into valid predictors of their success.

The conclusions offered above, and the data reported in the findings concerning the study of the several variables, form the basis for four recommendations:

1. <u>The College should continue the Trial Study Program in those departments where the availability of staff will permit</u>.

The College is unable to predict with certainty which students will maintain satisfactory averages. Students with less than normal minimum qualifications for admission have earned matriculation through the Trial Study Program, and, in a number of cases, have gone on to earn degrees. Therefore, the College should continue to accept such students if the availability of staff permits.

2. <u>The Trial Study Program itself should consist of a reduced program of study in the day whenever possible within the limits of available staff</u>.

Success in the Trial Study Program in the evening has not predicted equal success in subsequent quarters in the day program. If Trial Study Program students are admitted to the day program, their probable success can more efficiently be predicted in terms of variables that have been analyzed in terms of the program to which they actually sought admission rather than an alternate program which is not fully equivalent to the original. Since students suffered the greatest decline in grade point average as they transferred from the evening to the day and increased their course load, the chances of a continuing success for such students if admitted directly to the day should be improved if they are held initially to a reduced course load.

3. The College should be prepared to accept the fact that some students will take longer than two years to satisfy the requirements for degrees, while continuing to remain in good academic standing. The several programs of the College should be flexible enough to allow such students to continue to enroll until they are able to complete the requirements of the programs in which they are enrolled.

Those students who find it necessary to enroll for reduced loads as degree candidates in order to maintain initial successes experienced as Trial Study Program students will not be able to graduate at the end of only two years. In order to accomodate such students, the College must allow them longer than two years to earn degrees. This is already the case for part-time degree candidates in the Evening Division. It is assumed, however, that they will continue to be evaluated at the end of each quarter on the basis of the same standards as regular students.

4. <u>An analysis of the relationship between information contained in the admissions records of all students and their performance at the College should be established as an annual routine at the College</u>.

Variables relating most strongly to the prediction of performance at the College will vary among the departments, and may vary within the departments over the years. An extensive analysis of these variables should therefore be made annually, and the findings should be incorporated into the procedures and policies of the admissions office. Unless a variable is found to be strongly related to

success at the College, that variable should not be listed as a major determinant in the admission of students in the way that high school average has been in the past. Variables that correlate highly with success at the College should be used to construct prediction tables. While such tables have serious limitations, they should be of value to the admissions office if used with restraint.

Further Implications of the Project.

Certain implications of the research project should be mentioned briefly. The first of these concerns the significance of the research grant from the Cooperative Research Program of the Office of Education. Although Mohawk Valley Community College had attempted to evaluate the validity and effectiveness of its Trial Study Program, it was unable to carry the analysis further simply because of the heavy demands that would be made on staff time. The grant therefore allowed the College to initiate a more complete analysis than would otherwise have been possible in an area that is of critical concern to the basic purposes and policies of the College.

Second, the research revealed the extent to which one part of a college's program is functionally related to a number of other parts. In order to study the Trial

Study Program, the investigators had to consider the purposes of the College, the procedures as well as the policies affecting the admission of students, and the relationship of the several variables studied to the performance of all students at the College.

Third, the research revealed that a number of related factors merit further attention. A good deal of additional attention, on a continuing basis, needs to be given to the analysis of factors which can be used to predict the success of regular degree students. In order to do this effectively, however, the College will have to carefully reassess the devices that it uses to collect, record, and retrieve the data that is already available concerning the students. A careful review of present facilities and equipment will be required to determine if they are adequate for the task. If analysis of such data is to be introduced as an annual routine, better techniques will have to be developed to record and retrieve the data than have been used in the past. For example, the present methods used to record data concerning grade point average at the College make burdensome the task of analyzing the variables used in this study in relation to cumulative, as opposed to first quarter, grade point average.

At some point the College should be prepared to

investigate the role of non-intellective factors in the success of failure of its students. In addition to any instruments or devices that may be used to this end, the analysis should include non-academic features of the College's structure and program as well as matters related to the emotional maturity, certainty of goals, and personalities of its students.

Finally, the College should investigate a possible difference in grading practices in the evening and day divisions. Although differences may not in fact exist, and although the dimensions of the problem would be difficult to measure if it were, in fact, present, the unequal performance of Trial Study Program students in the evening and day programs suggests that an analysis in this area would be worthwhile.